

## CONSERVATION UPDATE

# The impact of the COVID-19 pandemic on songbird conservation

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## Introduction

Global awareness of wildlife trade and its impact on ecosystem and human health has increased during the COVID-19 pandemic (TRAFFIC 2021a). According to research by GlobeScan and WWF (GlobeScan & WWF 2020, WWF 2021), 81% of research participants believed that the closure of high-risk wild-caught animal markets is effective in preventing similar pandemics from happening in the future, while 85% said they were likely to support government efforts to close these markets. Since the outbreak of COVID-19, over 250 NGOs have called for a permanent end to commercial trade in terrestrial wild animals (Global Wildlife Conservation 2020), and at least four governments have adopted wildlife trade restrictions (TRAFFIC 2021a).

However, despite various initiatives for raising awareness, campaigning and tackling the illegal wildlife trade, poaching, trading and selling have continued. The Asian songbird trade has persisted on both national and international levels. Bird seizure data indicate that trade in Indonesia and Malaysia has not decreased despite the restrictions on travelling and moving goods (e.g. Chng *et al.* 2021, TRAFFIC 2021b). Moreover, some aspects of the trade—bird singing competitions, for example—shifted online during lockdowns, making them even more difficult to police and regulate (Armstrong & Chng 2020).

While the songbird trade has continued to thrive throughout the pandemic, conservation projects, researchers and local communities were negatively affected by COVID-19 and had to adapt to new working conditions. The IUCN SSC Asian Species Action Partnership (ASAP) is a partnership platform to end species extinctions in South-East Asia. At the end of 2020, ASAP conducted a survey of its 160 partner organisations to determine the impacts of COVID-19 on their work to conserve Critically Endangered land and freshwater vertebrate species in South-East Asia. Of the 64 respondents, an overwhelming 94% said their work had been affected. The most common impacts experienced were overall activity delays, travel restrictions, changes in funding and access to field sites. Close to 50% of respondents had seen funding reduced by 10–50% due to COVID-19, with another 11%

experiencing an even higher reduction. In addition, some felt that the threats to the species they work to conserve had been heightened during the pandemic because of increases in poaching (35%), forest loss (22%) and other human activities (27%).

To better illustrate the implications of the COVID-19 crisis on the conservation of songbirds, this article investigates the ongoing efforts of three organisations (Cikananga Conservation Breeding Centre, FLIGHT and EcosystemImpact) in Indonesia and how they have navigated this unprecedented crisis. We also consider how tourism-reliant industries, such as the birdwatching community, are impacted by the prevailing movement restrictions precipitated by the pandemic.

## Reduced income and increased costs—the importance of emergency funding

Indonesia felt the impacts of the COVID-19 pandemic some time after Europe and the Americas. Cikananga Conservation Breeding Centre (CCBC), situated in West Java, however, is funded almost exclusively by institutions from those continents. Therefore, the effects of the pandemic were felt from the early stages in the form of funding uncertainty.

CCBC breeds endemic Indonesian species, particularly songbirds, that are threatened with extinction, using tools including genetic management software to preserve their genetic diversity. These captive populations act as insurance for species at risk of becoming extinct in the wild, with the eventual aim of releasing individuals back into their native range.

The Center is in a privileged position to have core partners and other sponsors who remain committed to funding during this period of uncertainty. Other sponsors, however, had to reduce or entirely cease their funding, while income from visitors and volunteers dried up as international travel slowed and borders closed. This left CCBC in a position of financial instability, with a shortfall of around €15,000 within the first six months of the pandemic.

In response, CCBC had to restrict their operations and programmes to those that were deemed essential. This meant focusing primarily on *ex situ* activities: maintaining populations of



**Plate 1.** Rufous-fronted Laughingthrush *Garrulax rufifrons*, Cikananga Conservation Breeding Center, West Java, Indonesia, February 2017.

Critically Endangered and Endangered species, facilities, and staff. Whilst this undoubtedly reduced the strain on their finances, other sources of funding still had to be sought.

Amid this global pandemic, it is more challenging than ever to secure funding for conservation projects which, at the best of times, is competitive. Emergency conservation funds such as the ASAP Species Rapid Action Fund, supported by Fondation Segré, are designed to have funds readily available for emergencies and urgent conservation action. Being a recipient of support from the ASAP Species Rapid Action Fund, CCBC could quickly commit to continue employing their local staff and recommence conservation breeding efforts for select songbird species such as the Javan Green Magpie *Cissa thalassina* and the Rufous-fronted Laughingthrush *Garrulax rufifrons* (Plate 1). These species were prioritised because they are both Critically Endangered, with populations estimated at less than 250 individuals, and their breeding season was approaching. Besides funding, ASAP also tapped into their network of partners and connected CCBC with the Oriental Bird Club (OBC), who co-funded this work. Having both ASAP and OBC funding during this period helped CCBC mitigate the knock-on effects of the COVID-19 pandemic, enabling them to make progress in conservation breeding efforts. This included the successful breeding by two Critically Endangered female Javan Green Magpies who had previously never bred.

Unfortunately, Indonesia, and particularly West Java, has seen rising COVID-19 infection rates throughout 2021. Social restrictions are significantly

impacting the availability and price of products needed by CCBC, e.g. feed, medical supplies and building materials. This, in turn, has impeded the progress of conservation efforts and, at times, threatened to impact the welfare of the local bird populations housed within CCBC.

At the time of writing (August 2021), conservation efforts in Indonesia are at their most vulnerable point of the pandemic. With attention and resources being diverted away from illegal wildlife trade and conservation, many wildlife populations are in a state of desperation. The experience of CCBC shows the vital importance of accessible emergency grants which can act as a lifeline when unprecedented situations such as a global pandemic arise.

### Heightened risks of tackling songbird trade in the field during the COVID-19 pandemic

The persistence of the songbird trade during the pandemic has meant that conservation groups and law enforcement agencies have continued to work in the field during these difficult times, risking their health and safety (Plates 2–4). FLIGHT, an Indonesian non-profit conservation organisation, investigates and reports the illegal bird trade and assists law enforcement agencies and the police to stop smuggling.

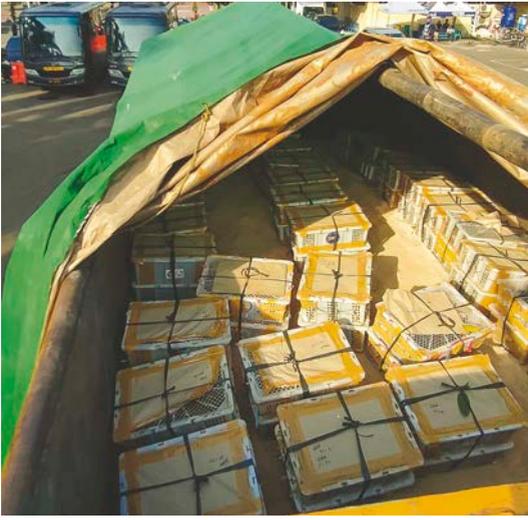
Based on FLIGHT's observations and surveys, COVID-19 did not reduce the bird trade between Sumatra and Java. In Java, markets and bird shops remain busy, driving demand for wild-caught birds from other islands, particularly Sumatra. Hence, FLIGHT sees a need to continue investigations and tackle illegal trade in the field, even during the pandemic.

In 2020, a successful FLIGHT investigation led to the seizure of thousands of smuggled birds en route from Sumatra to Java. However, after the investigation, two of the five staff were confirmed

**Plate 2.** White-eyes *Zosterops* sp. seized by law enforcement authorities with the help of FLIGHT in South Lampung, Sumatra, Indonesia. June 2021.



FLIGHT



**Plate 3.** Smuggled crates with songbirds found in a truck on its way from Sumatra to Java. June 2021.

FLIGHT



**Plate 4.** FLIGHT staff during one of the bird seizure operations in South Lampung, Sumatra. June 2021.

to have contracted COVID-19. One was quarantined in a government facility and the other self-isolated at home. Upon their recovery, the team returned to the field to continue their work.

“The COVID-19 pandemic has not stopped the smuggling of Sumatran birds to Java. There was no choice: we had to go back with the risk of contracting COVID-19 again.”—Marison Guciano, executive director of FLIGHT.

Even with a high COVID-19 infection rate and death toll in Indonesia, the illegal wildlife trade continues to thrive and songbird smuggling continues. In June 2021 alone, more than 25,000 birds were seized in Indonesia. Birds were confiscated on multiple occasions, including a smuggling attempt of 10,995 birds on 30 June, 3,726 on 22 June and

3,320 on 29 June. Conservation groups and enforcement agencies have to continue tackling the constant wildlife trafficking, even while experiencing reduced capacity and facing higher risks due to the pandemic.

**Building an *ex situ* conservation breeding programme over a conference call**

Since the pandemic began, many conservation projects and initiatives have had to adapt their practices and make adjustments to their programmes to enable them to continue. Despite these challenges, EcosystemImpact successfully established a new breeding programme during COVID-19 (Plates 5 & 6) and had its first breeding success of a highly threatened songbird species (Plate 7). Technology has played a big role in these achievements.

EcosystemImpact is an Indonesian foundation that aims to protect the wild landscapes of Simeulue and Bangkaru Islands, Aceh, Sumatra, through a sustainability approach where nature, people and business thrive alongside each other. Due to their isolated location, Simeulue and surrounding islands are home to endemic bird species of high conservation concern, including Nias Hill Myna *Gracula robusta*, Simeulue Hill

**Plate 5.** Aviary under construction at the Simeulue Barusan Shama Breeding Programme, Aceh, Sumatra, in July 2020.



ECOSYSTEMIMPACT

**Plate 6.** Aviary completed in September 2020.



ECOSYSTEMIMPACT



**Plate 7.** A Barusan Shama *Copsychus malabaricus hypolizus* fledgling from the project's first successful brood in July 2021.

Myna *Gracula religiosa miotera*, Babi Barusan Shama *Copsychus malabaricus opisthochrus*, Simeulue Barusan Shama *C. m. hypoliza*, Simeulue Oriental Magpie-robin *Copsychus saularis zacneus* and Silvery Pigeon *Columba argentina* (Lee *et al.* 2016, Amey 2021).

Barusan Shama is considered seriously threatened with extinction (Lee *et al.* 2016, Rheindt *et al.* 2019). However, the taxon is currently considered a subspecies of the widespread White-rumped Shama on the IUCN Red List, which remains classified as Least Concern. As a result, the conservation of this taxon was not prioritised until recently.

In 2019, the IUCN SSC Asian Songbird Trade Specialist Group (ASTSG) and European Association of Zoos and Aquaria (EAZA) Silent Forest Group agreed that a breeding programme should be established to secure the survival of Barusan Shama. Funded by Mandai Nature, Marlow Bird Park and Zoologischen Gesellschaft für Arten und Populationsschutz (ZGAP), EcosystemImpact started the development of a breeding facility on Simeulue Island in March 2020, during the early phase of the COVID-19 pandemic.

The pandemic made the initial development and building phase of the project challenging to execute. Simeulue is a remote island with limited access to building supplies and many materials had to be shipped from Sumatra. Due to the lockdown on Simeulue Island and in Medan in 2020, only a limited number of ferry services for food and supplies were operating, causing a delay in the project's building phase. Nevertheless, with the dedication of the EcosystemImpact team, the aviary was completed in September 2020.

COVID-19 also made it more difficult for EcosystemImpact to communicate and cooperate with partners and the conservation groups of which it is a member. Due to travel restrictions, technology became the primary means for maintaining close working partnerships and networks. They joined online video meetings and workshops hosted by IUCN SSC ASTSG and Silent Forest Group on the Asian songbird crisis and communicated frequently via messaging services. A number of these discussions focused on Barusan Shama conservation in the region and greatly benefitted the development of EcosystemImpact's Barusan Shama breeding programme. With Simeulue Island being a remote location with no access to veterinary services or guidance, these chats became crucial in developing EcosystemImpact's breeding programme and receiving guidance on husbandry.

Despite the challenges, the online communications established because of travel restrictions made EcosystemImpact more connected to the network of conservation partners and international experts, which consequently helped to establish and endorse the conservation breeding programme of Barusan Shama. The two offspring (Plate 7) hatched in 2020 represent the first successful breeding of this taxon. EcosystemImpact now has six male and six female adult birds, two fledglings, and five recently hatched chicks.

#### **Bird guides and communities left high and dry: COVID-19's impact on birding tourism**

The pandemic also devastated birding tourism in Asia and, along with it, the bird guides and communities who play a vital role in keeping wild bird populations safe from poaching (Plates 8 & 9). Not only are professional bird guides deprived of their primary source of income, but many local communities throughout the region also lost their revenue stream from providing logistical support to birdwatchers.

James Eaton, of Birdtour Asia, shared that the situation in Asia has been more challenging compared to other continents, where border restrictions have been less severe. 'Many of our clients managed to go on relatively hassle-free tours, albeit at short notice, to countries in Central and South America and Africa', he said.

In some countries, such as China and India, there remains domestic birding tourism from locals with higher disposable income and an interest in birding. However, professional bird guides in many South-East Asian countries, where the main clientele is international birdwatchers, saw guiding jobs grind to a complete halt from March 2020. Skilled guides in local communities were among the worst hit.



SAM VEASNA CENTRE.

**Plate 8.** The award-winning Tmatboey community ecotourism project is solely reliant on birding tourism and safeguards several Critically Endangered species. Cambodia, 2020.



MARK JASON VILLA

**Plate 9.** Carlito Gayramara, the local bird guide, scanning for Philippine Eagles *Pithecophaga jefferyi* on Mount Kitanglad, Mindanao, the Philippines, in 2018. We wish to share our condolences with the Gayramara family for the loss of Amelia, the wife of Carlito who for decades has welcomed and cooked for visiting birders. She sadly passed away due to COVID in September 2021.

‘Adun Bahrum, the finest local birder from Gunung Gede, and his team are always helping me and other tour companies or solo birders who visit Gunung Gede’, shared Khaleb Yordan, who runs Jakarta Birder, in Indonesia. ‘Now, he has no job due to the pandemic.’

The communities involved in birding ecotourism were seriously impacted too. As tours were cancelled, local communities involved in birding tourism were badly affected, with everyone associated with these tours (local guides, drivers, hosts) losing much or all of their annual income. ‘We were told some heart-breaking stories, where local agents had to sell their houses to keep themselves afloat’, said Eaton.

Bird guides and local communities involved in birding tourism are guardians of important bird habitats. Some guides are ex-poachers, using their knowledge and expertise to find rare species for birders. Other ex-poachers have turned their hunting hides and waterholes into photographic

hides, giving birdwatchers and photographers unprecedented views of birds. Furthermore, birding tourism deters poachers from operating freely in those areas. This is particularly important in many parts of Asia where there is a lack of large, landscape-scale protected areas, such that conservation relies heavily on local communities who protect their land. Birding tourism is often the only viable way for this to be achieved and it stands to reason that the COVID-19 pandemic could lead to developments that cause local extinctions.

Some guides have been able to pivot to alternative jobs to make ends meet. A few could leverage their extensive bird knowledge and were hired as consultants by conservation NGOs and researchers to carry out field surveys or trade research, and so continue contributing directly to songbird conservation. Yordan, for example, was recruited by Project Wallacea to do bird and habitat surveys in eastern Indonesia with the University of Indonesia. But, with conservation organisations themselves struggling, others have been less fortunate.

There remains a concern that some members of the communities might return to poaching in desperation. An investment in the continued survival of these communities is therefore an investment in community-led, *in situ* conservation of songbird populations and habitats. To keep guides and communities going through these times, Birdtour Asia raised over £11,500 (and an additional 50% matched funding) for local guides and communities in Indonesia, India, Cambodia, Laos, Vietnam and the Philippines.

### A lifeline for songbird conservation

The COVID-19 pandemic has put songbird conservation organisations, bird guides and birding tourism communities under new levels of pressure. They in turn have demonstrated their ability to be highly adaptable and innovative in overcoming the unprecedented challenges they have faced. The case studies outlined in this article show that being able to prioritise, be flexible, shift focus, use alternative and new tools, collaborate and ask for help are key for long-term resilience. However, there is no telling how long this pandemic will persist, and how those without safety nets—such as local communities—will be negatively impacted.

The *in situ* and local *ex situ* Asian songbird conservation projects affected by COVID-19 still need funding and support. ASTSG will continue to provide expertise and advise its partners during these challenging times. The ASAP Species Rapid Action Fund grants are still open for projects that need emergency funding to tackle the conservation of highly threatened species in South-East Asia, including Critically Endangered songbirds. More

details can be found at <https://www.speciesonthebrink.org/asap-grants>.

We encourage foundations, corporations, governments and individual donors to consider supporting songbird conservation efforts and bird guides, financially or otherwise. OBC has recently created a new conservation fund specifically targeted at the Asian Songbird Crisis. Members can be sure that every penny donated will go directly into the prevention of the extinction of the many avian species now under threat across the region. Should you wish to contribute to this work you can do so at <https://www.orientalbirdclub.org/donate>.

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